

# **EXHIBIT 5**

# UNDERSTANDING AND USING AMERICAN COMMUNITY SURVEY DATA: WHAT ALL DATA USERS NEED TO KNOW

Have you ever thought about how, or why, new roads, schools, after-school programs, or hospitals are placed in communities? What makes communities attractive to new businesses or tourists? Why there is no ATM or bike-share kiosk on a street corner? The answers often lie in the numbers—numbers that reflect what our communities look like, how our communities have changed, and how those changes impact our daily lives.

The U.S. Census Bureau's American Community Survey (ACS) is designed to answer these types of questions and to meet the needs of policymakers, business leaders, planners, and others nationwide who need good data to make informed decisions. The ACS provides a

detailed portrait of the social, economic, housing, and demographic characteristics of America's communities.

This handbook provides an overview of the ACS to help data users understand the basics of the survey, how the data can be used, how to judge the accuracy of ACS estimates, and how to access ACS data on the Census Bureau's Web site. It also includes some recent case studies that show how ACS data are being used to help address important policy and program issues. Links to additional ACS resources, including technical documentation for more advanced users, are included throughout the handbook.

## 1. UNDERSTANDING THE ACS: THE BASICS

### What Is the ACS?

The American Community Survey (ACS) is a nationwide survey designed to provide communities with reliable and timely social, economic, housing, and demographic data every year. A separate annual survey, called the Puerto Rico Community Survey (PRCS), collects similar data about the population and housing units in Puerto Rico. The Census Bureau uses data collected in the ACS and the PRCS to provide estimates on a broad range of population, housing unit, and household characteristics for states, counties, cities, school districts, congressional districts, census tracts, block groups, and many other geographic areas.

The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1.

ACS 1-year estimates are data that have been collected over a 12-month period and are available for geographic areas with at least 65,000 people. The Census Bureau combines 5 consecutive years of ACS data to produce estimates for geographic areas with fewer than 65,000 residents. These 5-year estimates represent data collected over a period of 60 months.<sup>1</sup>

<sup>1</sup>The Census Bureau previously released 3-year estimates based on 36 months of data collection. In 2015, the 3-year products were discontinued. The 2011-2013 ACS 3-year estimates, released in 2014, are the last release of this product.

Starting with the 2014 ACS, the Census Bureau is also producing "1-year Supplemental Estimates"—simplified versions of popular ACS tables—for geographic areas with at least 20,000 people.

Because the ACS is based on a sample, rather than all housing units and people, ACS estimates have a degree of uncertainty associated with them, called sampling error. In general, the larger the sample, the smaller the level of sampling error. To help users understand the impact of sampling error on data reliability, the Census Bureau provides a "margin of error" for each published ACS estimate. The margin of error, combined with the ACS estimate, give users a range of values within which the actual "real-world" value is likely to fall.

*TIP: In general, data users should be careful in drawing conclusions about small differences between two ACS estimates because they may not be statistically different.*

The ACS provides vital information on a yearly basis about our nation and its people, helping local officials, community leaders, businesses, and the public plan and make decisions based on the changes taking place in their communities. Through the ACS, we know more about demographic trends, jobs and occupations, educational attainment, veterans, homeownership, and many other topics. Because data collection is ongoing, the ACS also provides essential, up-to-date information about population and housing characteristics both before and after natural disasters like Super Storm Sandy or economic crises like the Great Recession of 2007 to 2009.

Table 1.1. **Population and Housing Data Included in American Community Survey Data Products****Social Characteristics**

Ancestry  
 Citizenship Status  
 Disability Status<sup>1</sup>  
 Educational Attainment  
 Fertility  
 Grandparents as Caregivers  
 Language Spoken at Home  
 Marital History<sup>2</sup>  
 Marital Status  
 Migration/Residence 1 Year Ago  
 Period of Military Service  
 Place of Birth  
 School Enrollment  
 Undergraduate Field of Degree<sup>3</sup>  
 Veteran Status<sup>2</sup>  
 Year of Entry

**Economic Characteristics**

Class of Worker  
 Commuting (Journey to Work)  
 Employment Status  
 Food Stamps/Supplemental Nutrition Assistance Program (SNAP)<sup>4</sup>  
 Health Insurance Coverage<sup>2</sup>  
 Income and Earnings  
 Industry and Occupation  
 Place of Work  
 Poverty Status  
 Work Status Last Year

**Housing Characteristics**

Computer and Internet Use<sup>5</sup>  
 House Heating Fuel  
 Kitchen Facilities  
 Occupancy/Vacancy Status  
 Occupants Per Room

**Plumbing Facilities<sup>6</sup>**

Rent  
 Rooms/Bedrooms  
 Selected Monthly Owner Costs  
 Telephone Service Available  
 Tenure (Owner/Renter)  
 Units in Structure  
 Value of Home  
 Vehicles Available  
 Year Householder Moved Into Unit  
 Year Structure Built

**Demographics Characteristics**

Age and Sex  
 Group Quarters Population  
 Hispanic or Latino Origin  
 Race  
 Relationship to Householder  
 Total Population

<sup>1</sup> Questions on Disability Status were significantly revised in the 2008 survey to cause a break in series.

<sup>2</sup> Marital History, Veterans' Service-Connected Disability Status and Ratings, and Health Insurance Coverage were added in the 2008 survey.

<sup>3</sup> Undergraduate Field of Degree was added in the 2009 survey.

<sup>4</sup> Food Stamp Benefit amount was removed in 2008.

<sup>5</sup> Computer and Internet Use was added to the 2013 survey.

<sup>6</sup> One of the components of Plumbing Facilities, flush toilet, and Business or Medical Office on Property questions were removed in 2016.

Source: U.S. Census Bureau.

*TIP: The ACS was designed to provide estimates of the **characteristics** of the population, not to provide counts of the population in different geographic areas or population subgroups. For basic counts of the U.S. population by age, sex, race, and Hispanic origin, visit the Census Bureau's Population and Housing Unit Estimates Web page.<sup>2</sup>*

The content collected through the ACS can be grouped into four main types of characteristics: social, economic, housing, and demographic, as shown in Table 1.1. Various tables in the ACS have different "universes," or base reference totals against which all other characteristics are compared. Some tables cover population characteristics, while others cover housing characteristics. Among the population tables, some cover the entire population (such as tables of the population by age), while some cover only a subset of the population (such as tables of employment status, which include data only for the population aged 16 and older).

ACS content is designed to meet the needs of federal government agencies, and every question in the ACS is asked for a reason. For example, questions about how

people get to work, when they leave, and the length of their commutes are used for planning improvements to roads, highways, rail lines, and bus routes, and for planning emergency response routes. Because participation in the ACS is mandatory, the Office of Management and Budget (OMB) will only approve necessary questions for inclusion in the ACS. The OMB's responsibility under the Paperwork Reduction Act requires that new questions demonstrate the practical utility of the data and minimize "respondent burden." Respondent burden can be defined in different ways, but is often related to the length of the interview or questionnaire, or the extent to which questions are viewed as being intrusive or too personal.

Some people are reluctant to respond to the ACS because of concerns about the confidentiality of the data. However, strict confidentiality laws protect all ACS information that could be used to identify individuals or households under Title 13 of the U.S. Code.<sup>3</sup> This is true even for interagency communication: other government agencies do not have the legal right to access individuals' confidential information.

<sup>2</sup> U.S. Census Bureau, Population and Housing Unit Estimates, <[www.census.gov/popest/](http://www.census.gov/popest/)>.

<sup>3</sup> U.S. Census Bureau, Title 13 - Protection of Confidential Information, <[www.census.gov/about/policies/privacy/data\\_protection/title\\_13\\_-\\_protection\\_of\\_confidential\\_information.html](http://www.census.gov/about/policies/privacy/data_protection/title_13_-_protection_of_confidential_information.html)>.

## Who Uses the ACS and Why?

The ACS puts up-to-date information about important social issues at the fingertips of people who need it, including policymakers, researchers, businesses, nongovernmental organizations, journalists, teachers, students, and the public (see Box 1.1). Businesses use ACS data to better understand their current or potential customers. The federal government uses ACS information to evaluate the need for federal programs and

to run those programs effectively. Nongovernmental organizations use the ACS in a variety of ways to monitor trends among important subgroups of the population. Journalists use ACS data to report on new or emerging social trends or to put a piece of anecdotal evidence into a broader context. State and local governments are using ACS information to keep track of year-to-year changes in their jurisdictions so they can better address the needs of their constituents.

### Box 1.1. How Different Data-User Communities Use ACS Data

**Federal agencies:** ACS data help determine how more than \$675 billion in federal funds are distributed to state and local areas each year.<sup>1</sup> Federal agencies rely on the ACS to help them make operational decisions, including managing and evaluating programs, determining eligibility for programs, and benchmarking other statistics. For example, the U.S. Department of Veterans Affairs uses ACS data on the characteristics of veterans to evaluate the need for educational, employment, and health care programs to assist those who have served in the military. The Special Supplemental Food Program for Women, Infants, and Children (WIC) uses income data from the ACS to determine the potential demand for food assistance across states and counties. The Appalachian Regional Commission (ARC) uses ACS data to assess the status of communities in the Appalachian Region on a host of social and economic measures, which in turn enables ARC to develop strategies to improve conditions in Appalachia. For more information about how federal agencies use ACS data, visit the Census Bureau's *American Community Survey Handbook of Questions and Current Federal Uses*.<sup>2</sup>

**Nongovernmental organizations:** The Lucile Packard Foundation for Children's Health uses ACS data to track annual changes in the well-being of children in California, including measures of child poverty, family structure, school enrollment, and employment status of parents. The Migration Policy Institute uses ACS data to present detailed, state-level information about the 42.4 million current U.S. residents who were born outside the United States. The State Health Access Data Assistance Center uses ACS data to monitor trends in health insurance coverage.

**Journalists:** Journalists regularly report ACS data to keep the public informed about emerging social, economic, housing, and demographic trends. For example, the *New York Times* used ACS data to map poverty rates and men's employment in America.<sup>3</sup> *The Wall Street Journal* reported on the cities with the fastest-growing median household incomes, based on ACS data.<sup>4</sup> *The Durango Herald* (Durango, Colorado) used ACS 5-year data to show that many of Colorado's newest residents are arriving from California and Texas.<sup>5</sup>

**State and local governments:** Information from the ACS is critical for state and local policymakers and planners who need up-to-date information about their communities to evaluate the need for new roads, hospitals, schools, senior centers, and other basic services. For example, the Council on Virginia's Future, which advises the Governor and the Virginia General Assembly, relies on ACS data to monitor annual trends in travel time to work. New York City's Department of City Planning used ACS data to identify the need for bilingual voting materials in certain New York neighborhoods.<sup>6</sup>

**Businesses:** Businesses use information from the ACS to understand their customers, make location or relocation decisions, and provide background information in loan applications. For example, ACS data are a key component of Zillow's database of more than 110 million U.S. homes, helping homeowners and potential buyers learn more about their

<sup>3</sup> Gregor Aisch, Josh Katz, and David Leonhardt, "Where Men Aren't Working," Dec. 11, 2014, <[www.nytimes.com/interactive/2014/12/12/upshot/where-men-arent-working-map.html?r=0#>](http://www.nytimes.com/interactive/2014/12/12/upshot/where-men-arent-working-map.html?r=0#>)>.

<sup>4</sup> Josh Zumbrun, "For Cities Getting Richer the Fastest, Look to the South," Sept. 15, 2016, <<http://blogs.wsj.com/economics/2016/09/15/for-cities-getting-richer-the-fastest-look-to-the-south/>>>.

<sup>5</sup> Jessica Pace, "Texas, California Sending Many New Residents to Colorado," Dec. 2, 2016, <<https://durangoherald.com/articles/118903-texas-california-sending-many-new-residents-to-colorado>>>.

<sup>6</sup> National Research Council, "Chapter 7: Legal and Social Equity Uses of ACS Data," in *Benefits, Burdens, and Prospects of the American Community Survey: Summary of a Workshop*, Daniel L. Cork, rapporteur, Committee on National Statistics, Division of Behavioral and Social Sciences and Education, Washington, DC: The National Academies Press, 2013, <[www.nap.edu/read/18259/chapter/8](http://www.nap.edu/read/18259/chapter/8)>.

<sup>1</sup> U.S. Census Bureau, *Uses of Census Bureau Data in Federal Funds Distribution*, 2017, <[www2.census.gov/programs-surveys/decennial/2020/program-management/working-papers/Uses-of-Census-Bureau-Data-in-Federal-Funds-Distribution.pdf](http://www2.census.gov/programs-surveys/decennial/2020/program-management/working-papers/Uses-of-Census-Bureau-Data-in-Federal-Funds-Distribution.pdf)>.

<sup>2</sup> U.S. Census Bureau, *American Community Survey Handbook of Questions and Current Federal Uses*, 2014, <[www.census.gov/programs-surveys/acs/operations-and-administration/2014-content-review/federal-uses.html](http://www.census.gov/programs-surveys/acs/operations-and-administration/2014-content-review/federal-uses.html)>.

*Box 1.1. How Different Data-User Communities Use ACS Data—Con.*

communities.<sup>7</sup> Many data vendors, such as Esri and Nielsen, also incorporate ACS data either directly or indirectly into their commercial data products, which businesses use for market segmentation, site selection, and marketing strategies.<sup>8</sup>

**Researchers:** Researchers both inside and outside of academia regularly use ACS data to test hypotheses, analyze data patterns across different geographic areas, and to investigate trends over time. For example, researchers at the Pew Research Center use ACS data—often in combination with decennial census data—to monitor long-term trends in U.S. education, income, employment, marriage, and family patterns. At Portland State University, researchers used ACS data to study migration patterns among young adults before and after the Great Recession.<sup>9</sup>

**Disaster response and recovery:** The American Red Cross uses ACS data to help identify vulnerable populations—before a disaster strikes—and to monitor the impacts of a disaster during the response and recovery phases.<sup>10</sup> In the aftermath of Hurricane Katrina in 2005, up-to-date, before-and-after snapshots of community characteristics helped first and subsequent responders to better target preparedness, response, and recovery efforts.<sup>11</sup>

<sup>7</sup> U.S. Census Bureau, *Stats in Action: Zillow*, 2015, <[www.census.gov/library/video/sia-zillow.html](http://www.census.gov/library/video/sia-zillow.html)>.

<sup>8</sup> U.S. Department of Commerce, Economics and Statistics Administration, *The Value of the American Community Survey: Smart Government, Competitive Businesses, and Informed Citizens*, 2015, <[www.esa.gov/sites/default/files/the-value-of-the-acs.pdf](http://www.esa.gov/sites/default/files/the-value-of-the-acs.pdf)>.

<sup>9</sup> Jason R. Jurjevich and Greg Schrock, *America on the Move*, <[www.americamoves.org/](http://www.americamoves.org/)>.

<sup>10</sup> National Research Council, “Chapter 3: Planning Social Services and Responding to Disasters,” in *Benefits, Burdens, and Prospects of the American Community Survey: Summary of a Workshop*. Daniel L. Cork, rapporteur, Committee on National Statistics, Division of Behavioral and Social Sciences and Education, Washington, DC: The National Academies Press, 2013, <[www.nap.edu/read/18259/chapter/4#51](http://www.nap.edu/read/18259/chapter/4#51)>.

<sup>11</sup> Kin Koerber, *Migration Patterns and Mover Characteristics from the 2005 ACS Gulf Coast Area Special Products*, 2006, <[www.census.gov/library/working-papers/2006/demo/koerber-01.html](http://www.census.gov/library/working-papers/2006/demo/koerber-01.html)>.

One of the main strengths of the ACS is the ability to disaggregate the data by age group, race, Hispanic origin, sex, and other characteristics. For example, data users can compare the poverty status of children and older adults, college enrollment rates for men and women, or housing costs for African Americans and non-Hispanic Whites. No other resource provides such a wealth of social, economic, housing, and demographic information for the nation, states, and substate geographic areas.

## History of the ACS

Every 10 years since 1790, Congress has authorized funds to conduct a national census of the U.S. population, as required by the U.S. Constitution. Censuses conducted between 1940 and 2000 consisted of a “short form,” which included basic questions about age, sex, race, Hispanic origin, household relationship, and owner/renter status, and a “long form” used for only a sample of households. The “long form” included not only the basic “short-form” questions but also detailed questions about social, economic, and housing characteristics.

Data from the census long form provided a detailed snapshot, every 10 years, of America’s population and households. However, in today’s world, our communities can change very quickly. Between decennial censuses, local governments, organizations, and businesses need timely data to assess and plan for local needs. Costly mistakes can result when planners and policymakers do not have current data on which to base their decisions. That is one of the key reasons the Census Bureau moved to a new way of gathering data. Rather than taking a snapshot of communities once every 10 years, the ACS was designed to provide a dynamic and timely picture of the nation every year.

The ACS underwent years of extensive testing, including demonstration surveys conducted in parallel with the 2000 Census to evaluate the reliability of survey results. The ACS achieved full, nationwide implementation in 2005 for the household population and was expanded to cover the full population (including group quarters—such as college dormitories) in 2006. In 2010, the ACS replaced the census long form as the nation’s source of social and economic data for population and housing characteristics.



Over time, questions have been added, revised, or removed from the survey, as shown in Table 1.1. For example, in 2008 three new questions on marital history, health insurance coverage, and veteran's service-connected disability were added, while the questions on disability were significantly revised to cause a break in series. The data from these new and revised questions collected in 2008 were first available in the ACS products released in 2009. A new question on bachelor's field of degree was added in 2009—with data available in 2010—while in 2013, three new questions on computer ownership and Internet access were added, with data available in 2014.

When a new question is added to the survey, 1-year estimates are available the following year, but it takes 5 years to accumulate data for small geographic areas. While ACS 1-year estimates of health insurance coverage were first available in 2009, ACS 5-year estimates of coverage (for 2008–2012) were first available in 2013.

In 2014, the Census Bureau conducted a comprehensive assessment of the ACS program, including a review of each ACS question. This [ACS Content Review](#) sought to understand which federal programs use the information collected by each question and assess how the Census Bureau might reduce respondent burden.<sup>4</sup> Based on this assessment, the questions on the presence of a flush toilet and whether there is a business or medical office on the property were removed from the ACS, beginning with the 2016 survey.

The sample size of the ACS and the ways data are collected have also changed over time, as described in more detail in the next section.

## How Are ACS Data Collected?

From 2005 through 2012, the ACS collected data using three sequential methods, or “modes”: paper questionnaires through the mail, phone interviews, and personal visits with a Census Bureau interviewer. Starting in 2013, the Census Bureau added a fourth mode—an Internet response option—that simplified data collection and reduced survey costs. Starting in late 2017, based on declining response rates and increasing costs, the Census Bureau discontinued using phone interviews to follow up with nonrespondents. The annual sample size of the ACS has also increased over time, from 2.9 million addresses in 2005 to more than 3.5 million addresses in 2015. This increased sample

size has improved the precision of the ACS estimates. Over a 5-year period, the Census Bureau samples approximately 1-in-9 households nationwide, but the sampling rate is higher in areas with small populations and low predicted response rates.

Of the 3.5 million addresses selected for ACS interviews in 2015, about 2.3 million resulted in final interviews. The number of final interviews is smaller than the number of initial addresses selected because the Census Bureau conducts in-person interviews with only a subset of those who do not respond by Internet, mail, or phone. Addresses are also excluded if they are determined to be invalid or commercial, or if a household refuses to participate. In 2015, the national response rate for the ACS was 95.8 percent.<sup>5</sup> For more information about ACS sample size and response rates, visit the Census Bureau's Web page on [Sample Size and Data Quality](#).<sup>6</sup>

The annual ACS sample is smaller than that of the 2000 Census long-form sample, which included about 18 million housing units. As a result, the ACS needs to combine population or housing data from multiple years to produce reliable numbers for small counties, neighborhoods, and other local areas. To provide information for communities each year, the ACS currently provides 1-year estimates for geographic areas with at least 65,000 people and 5-year estimates for smaller geographic areas down to the census tract and block-group level. Starting with the 2014 ACS, the Census Bureau is also producing 1-year Supplemental Estimates—simplified versions of popular ACS tables for geographic areas with populations of 20,000 or more.

One important fact to remember about the ACS is that the request to complete the survey is not mailed to specific people, but rather to specific addresses. The Census Bureau selects a random sample of addresses to be included in the ACS. Each address has about a 1-in-480 chance of being selected in a given month, and no address should be selected more than once every 5 years. Each month, the Census Bureau sends an initial mail package to approximately 295,000 addresses across the United States. This is a small number of housing units considering there are more than 180 million addresses in the United States.

<sup>4</sup> U.S. Census Bureau, American Community Survey, 2014 Content Review, <[www.census.gov/programs-surveys/acs/operations-and-administration/2014-content-review.html](http://www.census.gov/programs-surveys/acs/operations-and-administration/2014-content-review.html)>.

<sup>5</sup> The survey response rate is the ratio of the estimate of housing units interviewed after data collection is complete to the estimate of all units that should have been interviewed. Interviews include complete and partial interviews with enough information to be processed.

<sup>6</sup> U.S. Census Bureau, American Community Survey, Sample Size and Data Quality, <[www.census.gov/acs/www/methodology/sample-size-and-data-quality/](http://www.census.gov/acs/www/methodology/sample-size-and-data-quality/)>.

Until 2015, the Census Bureau sent all selected addresses an advance notification letter informing people living at that address that they had been selected to participate in the ACS. Shortly thereafter (for most U.S. addresses), instructions for completing the survey by Internet were mailed. Beginning in August 2015, the Census Bureau eliminated the advance notification letter and instead included instructions in the initial mail package for completing the survey by Internet or over the phone through a toll-free Telephone Questionnaire Assistance (TQA) line. If households do not respond by Internet or TQA, then a paper questionnaire is mailed to the address. In Puerto Rico and some hard-to-reach areas, only a paper questionnaire is mailed.

Until 2017, if no response was received by Internet, TQA, or mail within a month following the initial mailing, the Census Bureau followed up with a telephone interview when a telephone number was available. However, beginning in October 2017, the Census Bureau discontinued the telephone Nonresponse Followup operation because of declining response rates and increasing costs. Respondent data are still collected via telephone through the TQA operation.

If the Census Bureau is unable to get a response by Internet, mail, or TQA, then the address may be selected for an in-person interview. Because of the high cost per completed interview, the Census Bureau samples about one in three nonrespondent housing units for personal visit interviews. The proportion of nonresponding households selected for in-person interviews is higher in areas with lower predicted response rates. A sample of people living in group quarters facilities—such as college dorms, skilled nursing facilities, or correctional facilities—is also interviewed in person to ensure coverage of people who are not living in housing units.

### **Population Controls**

As with most household surveys, the ACS data are controlled so that the numbers of housing units and people in certain categories agree with the Census Bureau's official estimates. The ACS uses a weighting method to ensure that ACS estimates are consistent with official Census Bureau population estimates by age, sex, race, and Hispanic origin—as well as estimates of total housing units. ACS estimates are controlled to official population and housing units at the county level. ACS single-year estimates are controlled to population and total housing unit estimates as of July 1 of the survey year, while ACS 5-year estimates

are controlled to the average of the July 1 population and housing unit estimates over the 5-year period.

Starting with the 2009 survey, ACS estimates of the total population of incorporated places (self-governing cities, towns, or villages) and minor civil divisions (such as county precincts) are also adjusted so that they are consistent with official population estimates.

*TIP: ACS data for small statistical areas (such as census tracts) have no control totals, which may lead to errors in the population and housing unit estimates. In such cases, data users are encouraged to rely more upon noncount statistics, such as percent distributions or averages.*

For more information about ACS methods, visit the Census Bureau's [Design and Methodology Report](#) Web page.<sup>7</sup>

### **When Are ACS Data Released?**

ACS data are very timely because they are released in the year immediately following the year in which they are collected (see Table 1.2). Beginning with data collected in 2005, 1-year estimates have been published for areas with populations of 65,000 or more, including all states, the District of Columbia, and many large counties and cities. In 2010, the Census Bureau released the first ACS 5-year estimates for the nation, states, cities, counties, and other small geographic areas. These 5-year estimates have been updated annually by removing the earliest year and replacing it with the latest one, thus providing an unprecedented ability to annually monitor social and economic trends in local communities.

The Census Bureau also produced ACS 3-year estimates, starting in 2008, but that series was discontinued in 2015. However, every community in the nation will continue to receive a detailed statistical portrait of its social, economic, housing, and demographic characteristics through ACS 1-year and 5-year data products.

In July 2016, the Census Bureau released a series of Supplemental Estimates, consisting of new 1-year estimates for geographic areas with populations of 20,000 or more. These tables provide 1-year estimates for many geographic areas that were previously only available through the 3-year or 5-year data products.

<sup>7</sup> U.S. Census Bureau, American Community Survey, American Community Survey Design and Methodology, <[www.census.gov/programs-surveys/acs/methodology/design-and-methodology.html](http://www.census.gov/programs-surveys/acs/methodology/design-and-methodology.html)>.

Table 1.2. Release Schedule for ACS Data

Year of data release	Data product, population threshold, and year(s) of data collection			
	1-year estimates (65,000+)	1-year Supplemental Estimates (20,000+)	3-year estimates (20,000+)	5-year estimates (All areas)
2006	2005	NA	NA	NA
2007	2006	NA	NA	NA
2008	2007	NA	2005-2007	NA
2009	2008	NA	2006-2008	NA
2010	2009	NA	2007-2009	2005-2009
2011	2010	NA	2008-2010	2006-2010
2012	2011	NA	2009-2011	2007-2011
2013	2012	NA	2010-2012	2008-2012
2014	2013	NA	2011-2013	2009-2013
2015	2014	NA	NA	2010-2014
2016	2015	2014/2015	NA	2011-2015
2017	2016	2016	NA	2012-2016

NA Not available.

<sup>1</sup> The Census Bureau produced ACS 3-year estimates starting in 2008, but that series was discontinued in 2015.

<sup>2</sup> Five-year estimates are available for areas as small as census tracts and block groups.

Source: U.S. Census Bureau.

ACS data collected for earlier years, from 2000 through 2004, are also available for areas with 250,000 people or more, including all states, the District of Columbia, and many large counties and cities.<sup>8</sup>

## Additional Background Information

### American Community Survey Site Map

<[www.census.gov/acs/www/sitemap.php](http://www.census.gov/acs/www/sitemap.php)>

The ACS site map provides an overview of the ACS-related links and materials that are available on the Census Bureau's Web site.

### What Is the ACS?

<[www.census.gov/programs-surveys/acs/about.html](http://www.census.gov/programs-surveys/acs/about.html)>

This Web page includes basic information about the ACS and provides links to additional background materials.

### ACS Questionnaire Archive

<[www.census.gov/programs-surveys/acs/methodology/questionnaire-archive.html](http://www.census.gov/programs-surveys/acs/methodology/questionnaire-archive.html)>

Browse archived sample ACS questionnaires for the household and group quarters populations in English and Spanish with instruction guides from 1996 through the present.

### Methodology

<[www.census.gov/programs-surveys/acs/methodology.html](http://www.census.gov/programs-surveys/acs/methodology.html)>

This Web page contains links to information on ACS data collection and processing, evaluation reports, and related topics.

### Questions on the Form and Why We Ask

<[www.census.gov/acs/www/about/why-we-ask-each-question/](http://www.census.gov/acs/www/about/why-we-ask-each-question/)>

This Web page provides more information about how federal agencies and other data users use the ACS in their work.

### ACS Data Releases

<[www.census.gov/programs-surveys/acs/news/data-releases.html](http://www.census.gov/programs-surveys/acs/news/data-releases.html)>

This Web page includes information about the ACS data release schedule, guidance on using the latest ACS data, and technical information about geography and product changes. Users can also browse the notes from previous years.

### Table and Geography Changes

<[www.census.gov/programs-surveys/acs/technical-documentation/table-and-geography-changes.html](http://www.census.gov/programs-surveys/acs/technical-documentation/table-and-geography-changes.html)>

This Web page provides information about changes to tables and geography for each ACS data release.

<sup>8</sup> U.S. Census Bureau, American Community Survey, American Community Survey Design and Methodology, <[www.census.gov/programs-surveys/acs/methodology/design-and-methodology.html](http://www.census.gov/programs-surveys/acs/methodology/design-and-methodology.html)>.